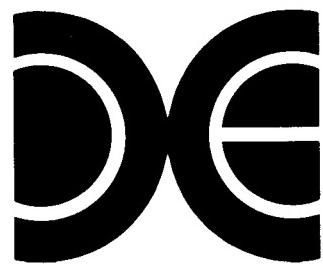
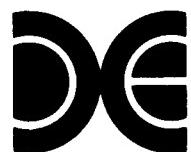


BATTLE WINGS™



INSTALLATION INSTRUCTIONS



DATA EAST USA, INC.

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DIP SWITCH SETTINGS

| DIP SWITCH 1 | | | | |
|--------------|--------------------|--------------------|--------------------|--------------------|
| No. | SETTING | | | |
| 1 | OFF | ON | OFF | ON |
| 2 | OFF | OFF | ON | ON |
| | 1 COIN 1 CREDIT | 1 COIN 2 CREDIT | 1 COIN 3 CREDIT | 2 COIN 1 CREDIT |
| 3 | OFF | ON | OFF | ON |
| 4 | OFF | OFF | ON | ON |
| | 1 COIN 1 CREDIT | 1 COIN 2 CREDIT | 1 COIN 3 CREDIT | 2 COIN 1 CREDIT |
| 5 | OFF | | ON | |
| | GAME | | DIAG | |
| 6 | OFF | | ON | C T U R |
| | TABLE | | UPRIGHT | MODE |
| 7 | OFF | | ON | KEEP OFF |
| | GAME | | TEST | |
| 8 | OFF | | ON | KEEP OFF |
| | GAME | | TEST | |

| DIPSWITCH 2 | | | | |
|-------------|--|--|--|-------------------------|
| No. | SETTING | | | |
| 1 | OFF | | ON | NUMBER OF AIR CRAFTS |
| | 3 | | 5 | |
| 2 | OFF | ON | OFF | ON |
| 3 | OFF | OFF | ON | ON |
| | 20,000 EXTRA FIGHTER, OVER 20,000 EXTRA FIGHTER FOR EVERY 40,000 | 20,000 EXTRA FIGHTER, OVER 20,000 EXTRA FIGHTER FOR EVERY 60,000 | 40,000 EXTRA FIGHTER, OVER 40,000 EXTRA FIGHTER FOR EVERY 80,000 | 40,000 EXTRA FIGHTER |
| 4 | OFF | | ON | DIFFICULTY ENEMY CRAFTS |
| | EASY | | DIFFICULT | |
| 5 | OFF | | ON | DIFFICULTY MISSILES |
| | EASY | | DIFFICULT | |
| 6 | | | | NOT USED |
| 7 | OFF | | ON | JAPAN/ UNITED STATES |
| | JAPAN | | UNITED STATES | |
| 8 | | | | NOT USED |

POWER SUPPLY

| | | |
|------|-----|------|
| +5V | ±2% | 5A |
| +12V | ±2% | 1A |
| -5V | ±2% | 0.1A |

OPERATION ENVIRONMENTS

| | Temperature | Humidity |
|-----------|-------------|----------|
| Operation | 5 ~ 35° C | 20 ~ 80% |
| Storage | -15 ~ 65° C | 10 ~ 90% |

CRT MONITOR

(1) Color Signals R.G.B. Separate

Black 0 – +2V
Image Signal +2.5 V +4V

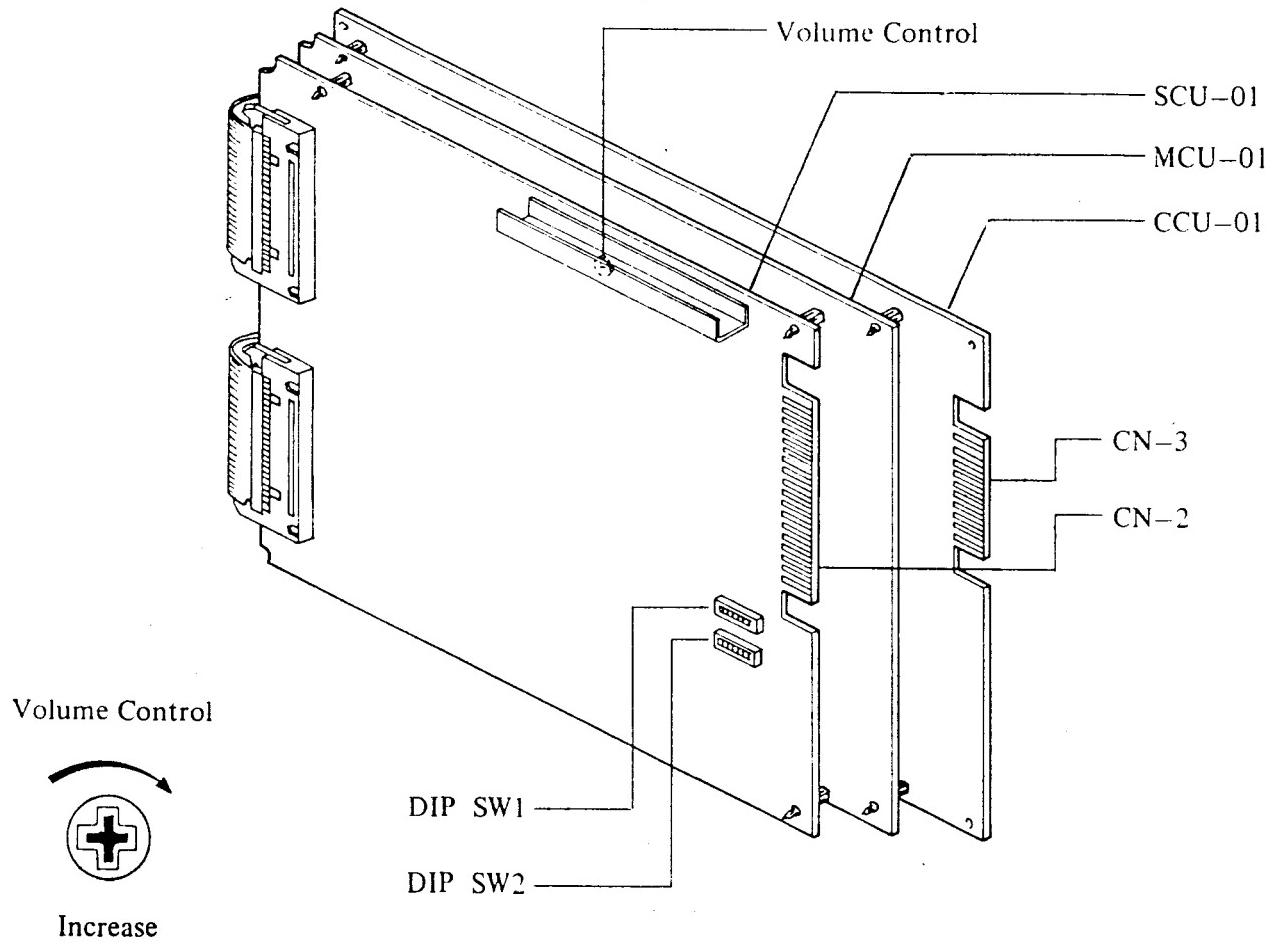
(2) Synchronize Signal Composite or Horiz/Vert separated.

0 0 – 0.5V
1 +3V – +5V

PCB IDENTIFICATION

CONNECTOR SCU-01 CR7E-36DA-3.96E (CN-2)

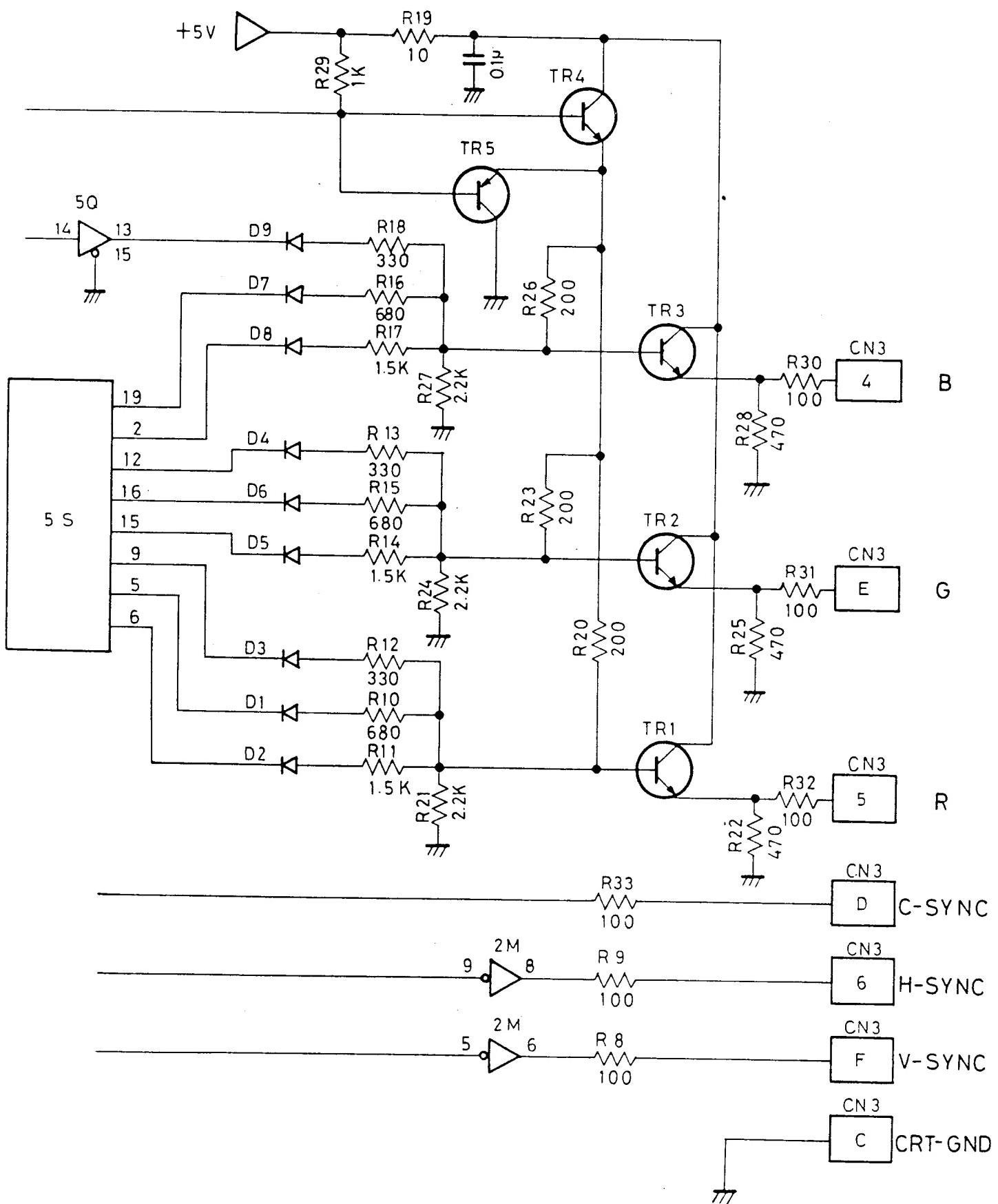
CCU-01 CR7E-20DA-3.96E (CN-3)



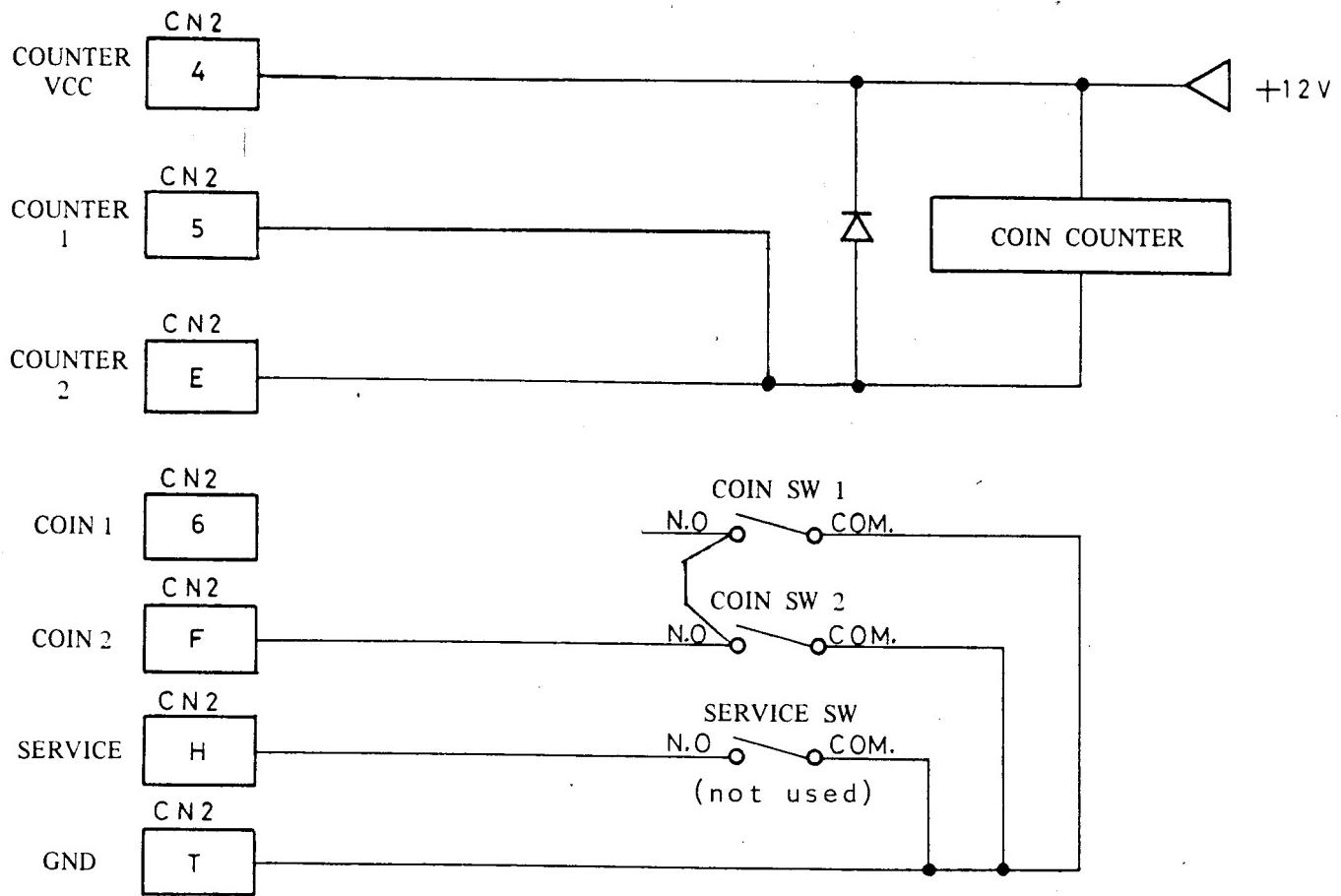
MONITOR CONNECTION PCB CCU-01

Monitor input composite signals – Horiz/Vert on +5V can be connected.

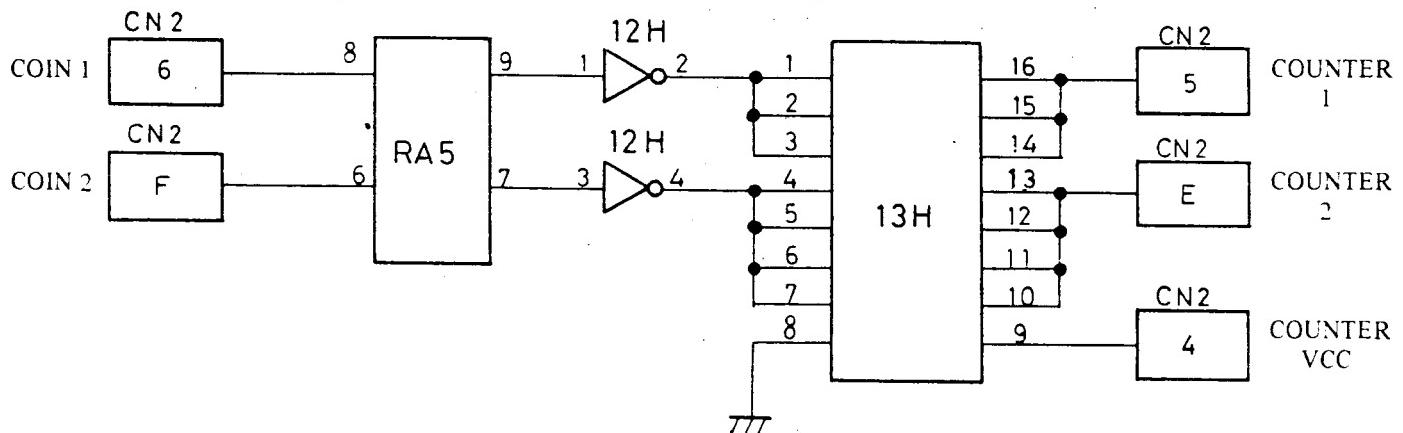
Circuit diagram of each signal shown below.

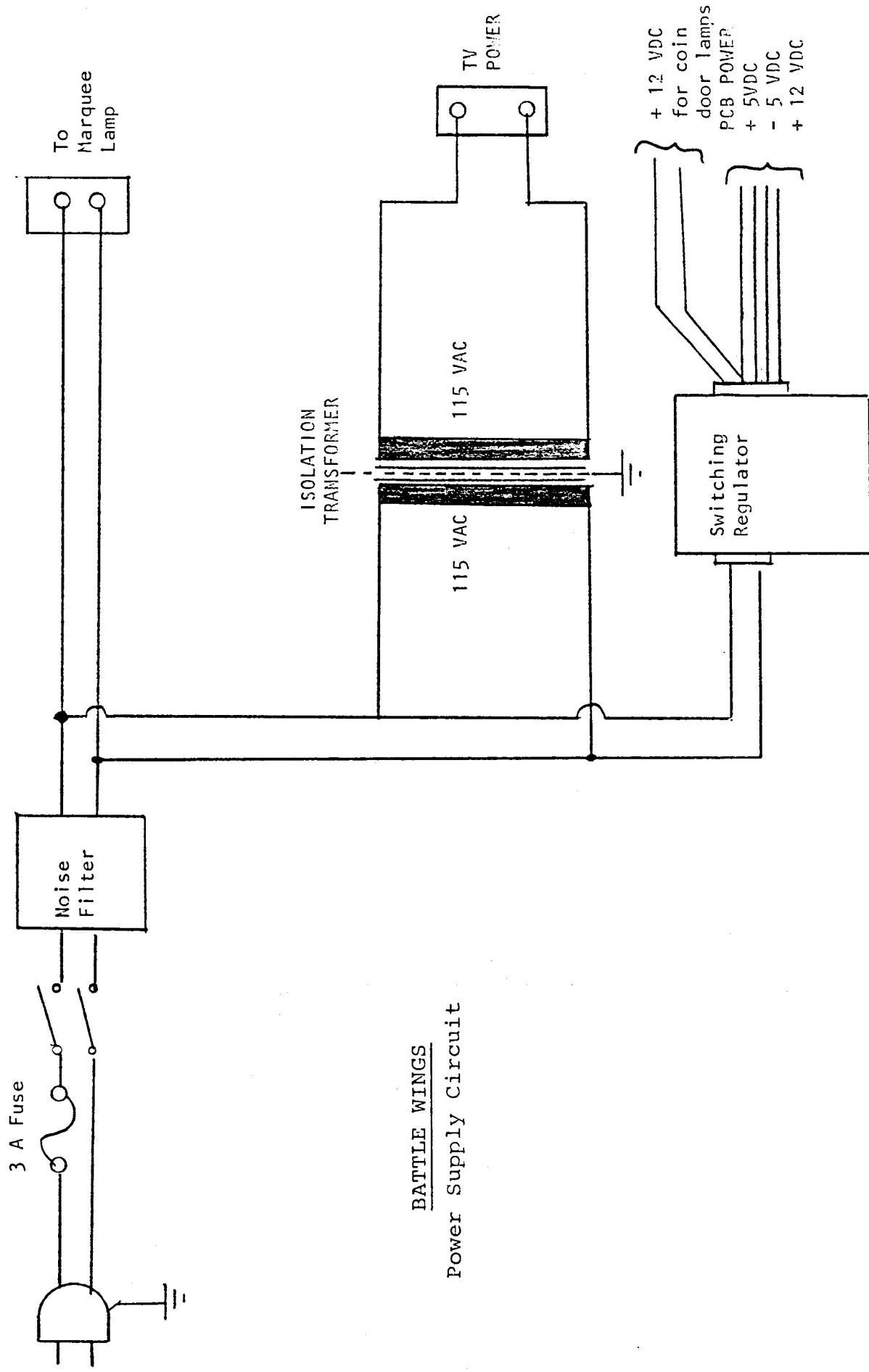


COIN COUNTER - CIRCUIT



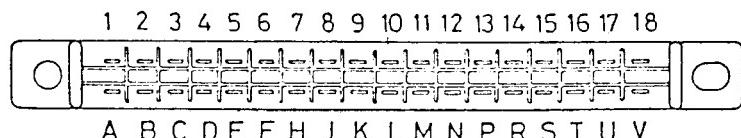
COIN COUNTER - DRIVE CIRCUIT PCB SCU-01





HARNESS CONNECTION

1) Terminal Numbering CR7E-36DA-3.96E (HIROSE) 3.96mm Pitch



CR7E-20DA-3.96E (HIROSE) 3.96mm Pitch



2) Signal to Terminal

CCU-01 Connector CN3-CR7E-20DA-3.96E

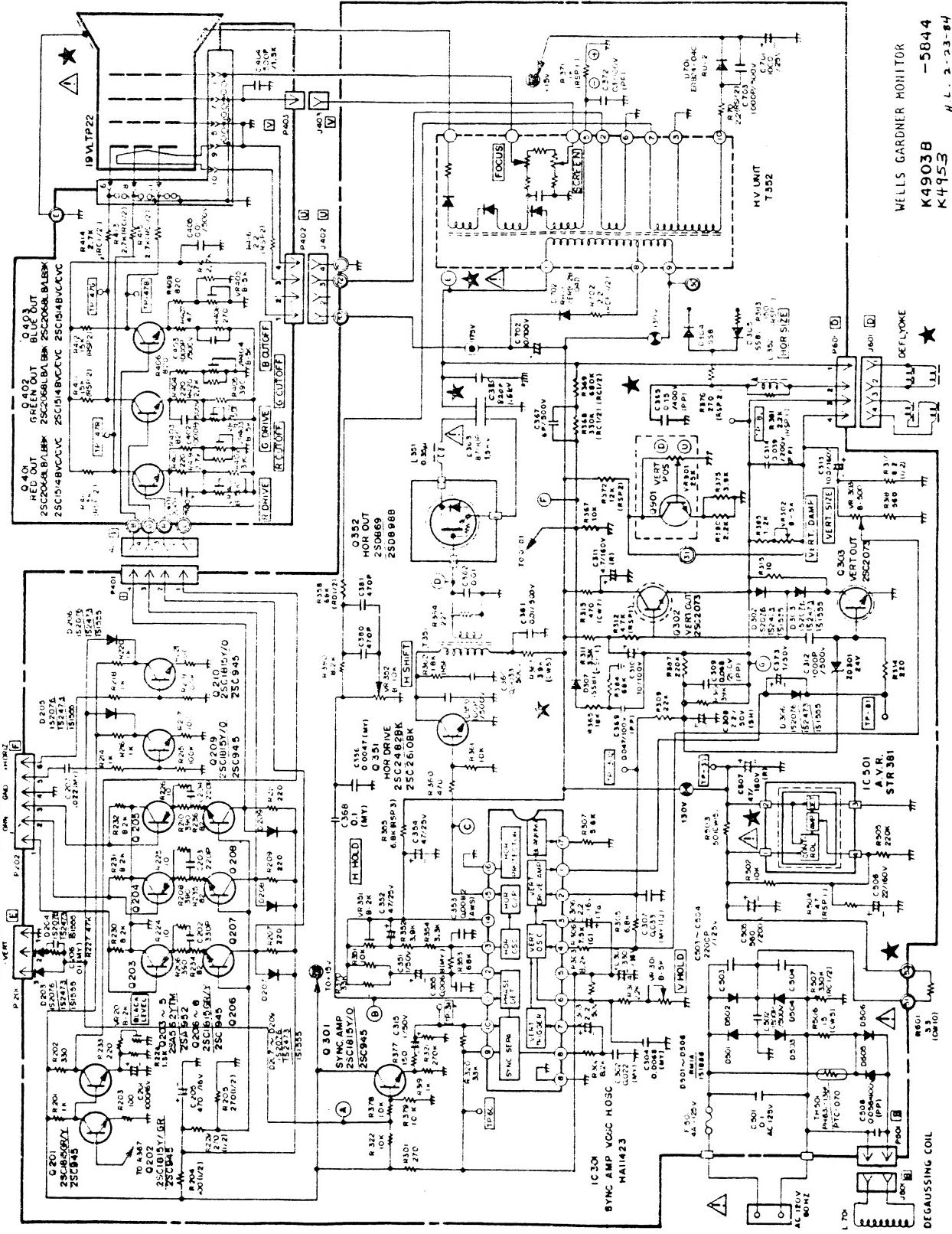
| Pin | Signal | | Pin | Signal | |
|-----|--------|--|-----|---------|--|
| 1 | GND | | A | GND | |
| 2 | GND | | B | GND | |
| 3 | GND | | C | TV. GND | |
| 4 | TV. B | | D | SYNC. | |
| 5 | TV. R | | E | TV. G | |
| 6 | H-SYNC | | F | V-SYNC | |
| 7 | | | H | | |
| 8 | +5V | | J | +5V | |
| 9 | +5V | | K | +5V | |
| 10 | +5V | | L | +5V | |

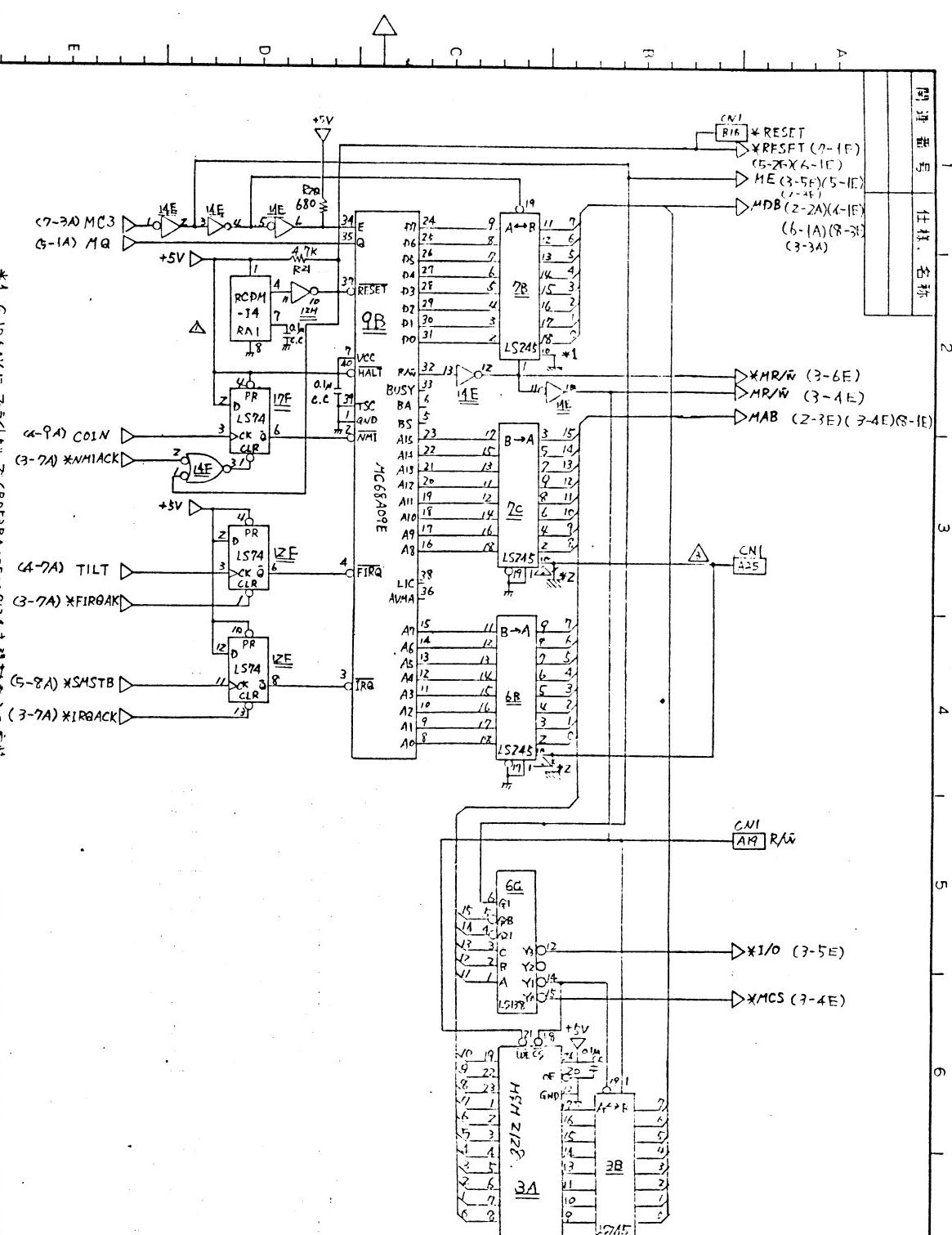
SCU-01 Connector CN2-CR7E-36DA-3.96E

| Pin | Signal | | Pin | Signal | |
|-----|-------------|--|-----|------------|--|
| 1 | +12V | | A | +12V | |
| 2 | +5V | | B | +5V | |
| 3 | +5V | | C | +5V | |
| 4 | COUNTER Vcc | | D | -5V | |
| 5 | COUNTER 1 | | E | COUNTER 2 | |
| 6 | COIN 1 | | F | COIN 2 | |
| 7 | TIILT SW. | | H | SERVICE | |
| 8 | 1P | | J | 2P | |
| 9 | 1P SHOOT 2 | | K | 2P SHOOT 2 | |
| 10 | 1P SHOOT 1 | | L | 2P SHOOT 1 | |
| 11 | 1P DOWN | | M | 2P DOWN | |
| 12 | 1P UP | | N | 2P UP | |
| 13 | 1P LEFT | | P | 2P LEFT | |
| 14 | 1P RIGHT | | R | 2P RIGHT | |
| 15 | SPEAKER + | | S | SPEAKER - | |
| 16 | GND | | T | GND | |
| 17 | GND | | U | GND | |
| 18 | GND | | V | GND | |

COCKTAIL
TABLE
ONLY

19" COLOR GAME MONITOR SCHEMATIC DIAGRAM

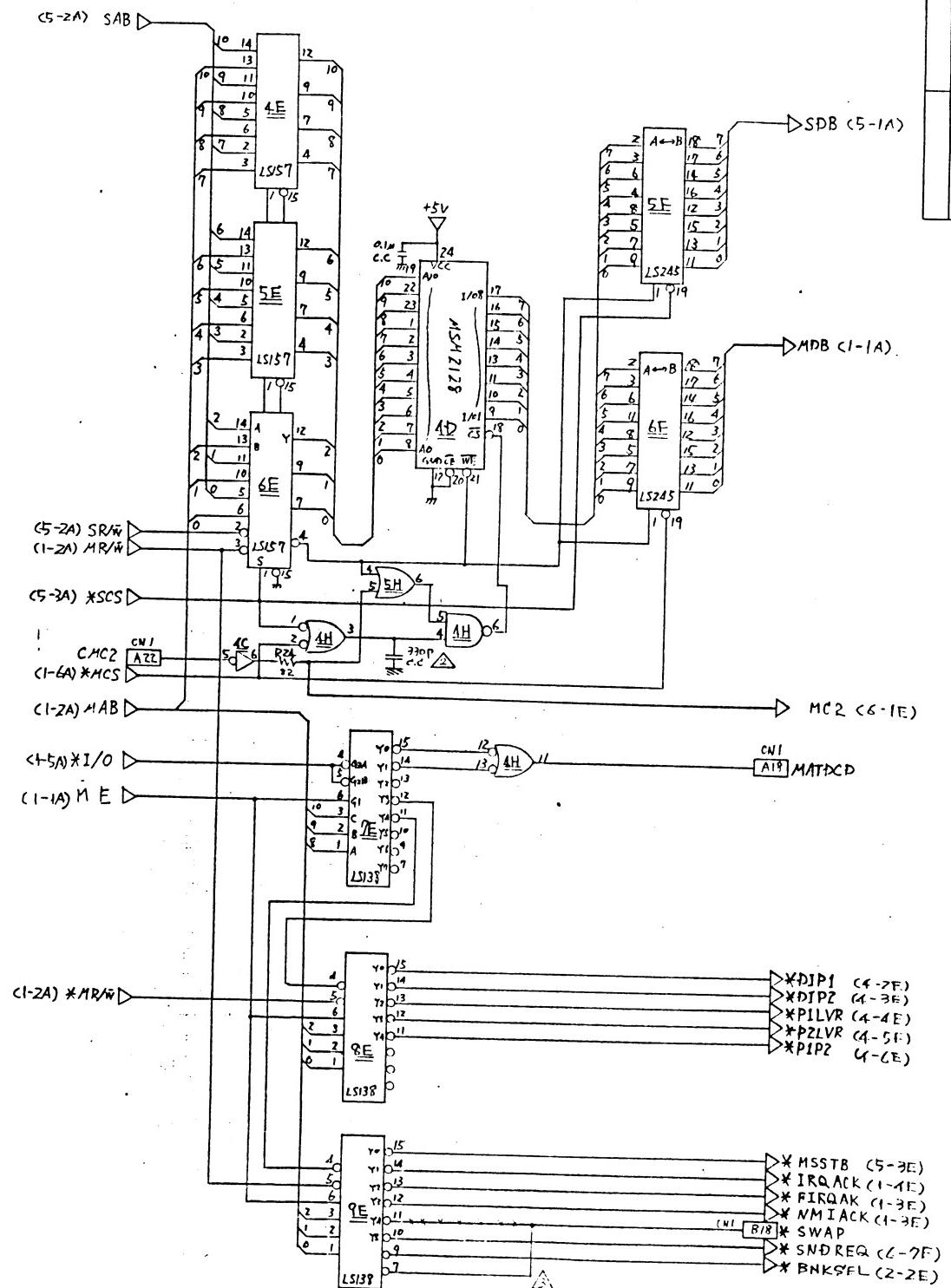




| 記号 | 相当 | 年月日 | 改 | 精工所 | 符号 | 部品、回路番号 | 名稱 | 仕様 | 材質 | 規格 |
|-----------------------|----|-----|--------------------|--------------------|----------------------|-------------------|------------|----|----|-----|
| 材質 | | | 處理 | | 公差 | 名稱 | | | | |
| アルミニウム A1 14-14 | | | 相当 <i>14-14</i> | 相当 <i>14-14</i> | 部位 尺寸 規格 規格 | 回路番号 K-10694-2 | SCU-Q1 回路板 | | | 1/2 |

△ 59.10.15 水。 河口外海之水。 色深青。 清澈。 有微波。 有沙砾。

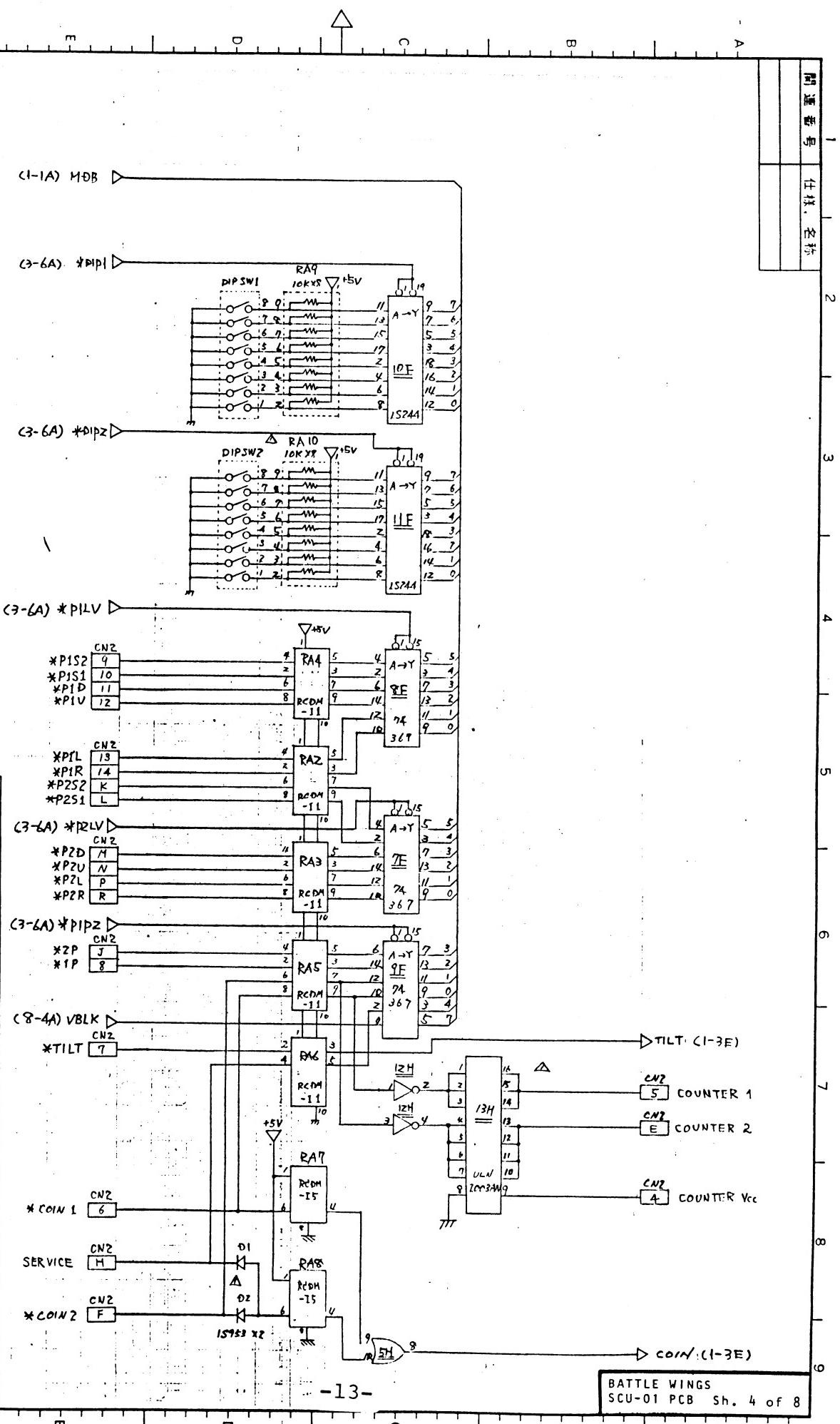
三角法



| 記号 相当 | 年月日 | 改 訂 個 所 | 序号 | 部品、圖面番号 | 名 称 | 仕様、材質 | 規 格 |
|----------|-----|------------------|----|---------|--------|-------|--------|
| 材質 | 處理 | 小类 | 分類 | | | | |

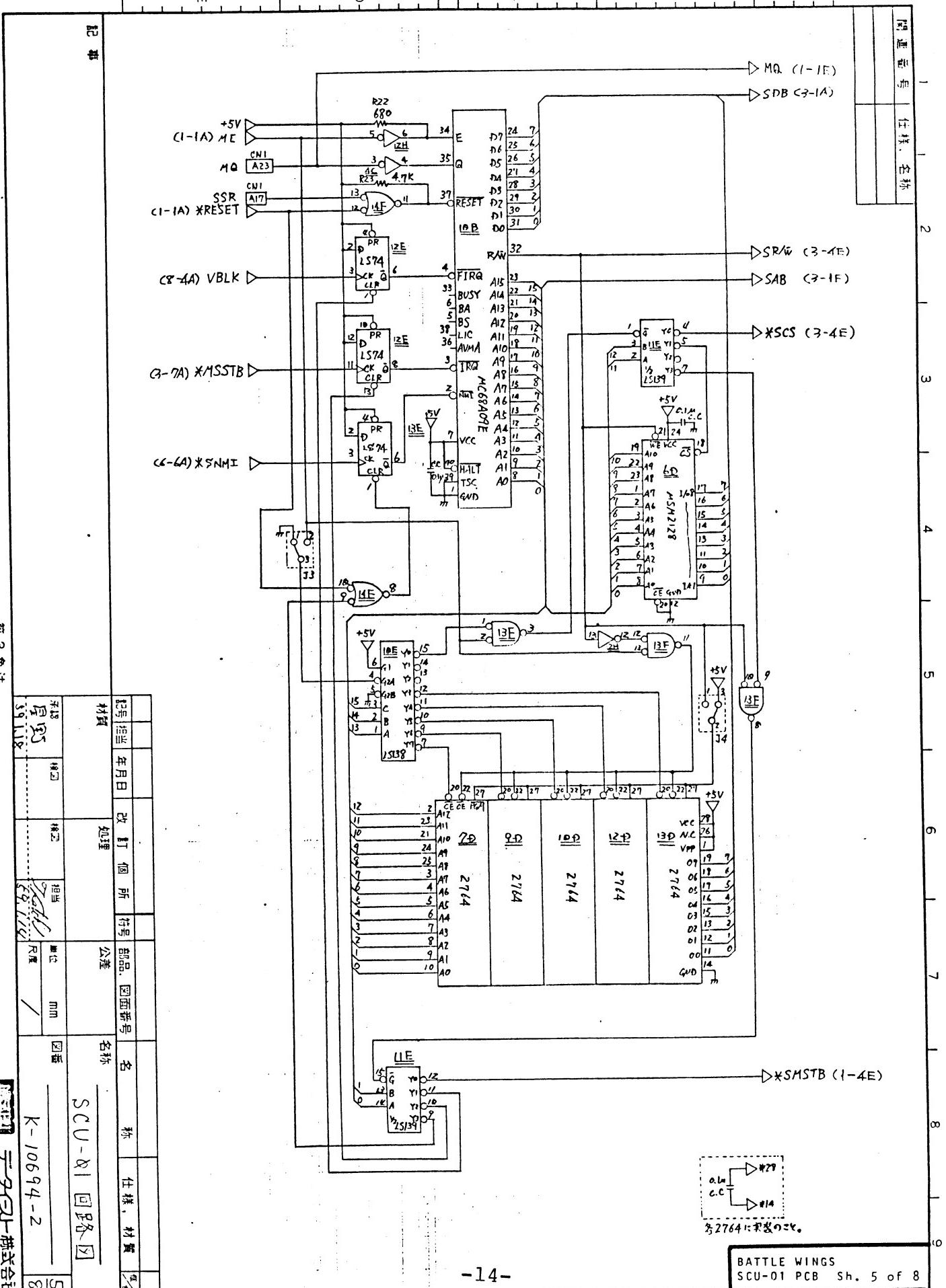
記事
△ 57.3 29 ^{10月} AH 9.245.6 in T1:221 9月 錄註

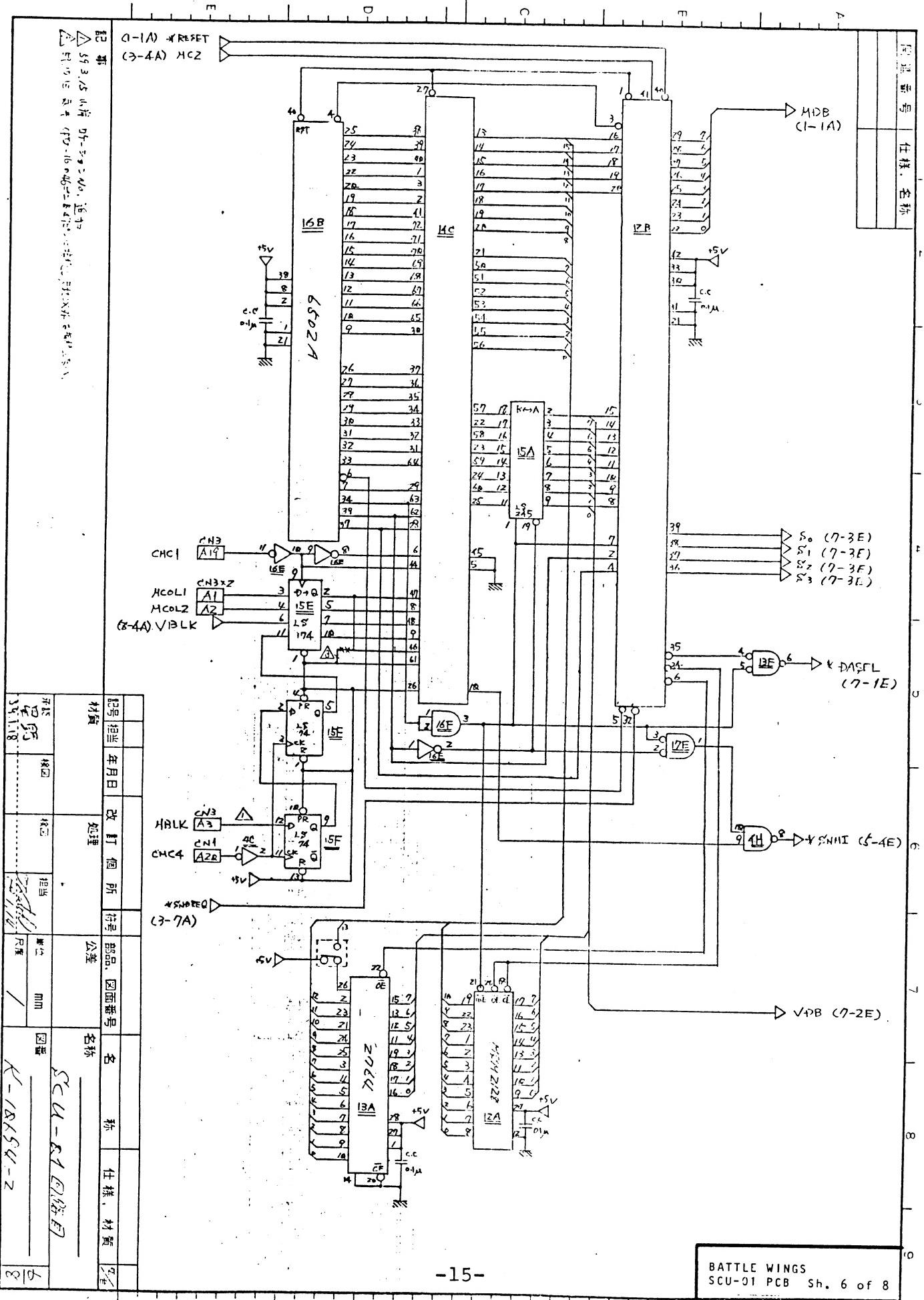
第3角法

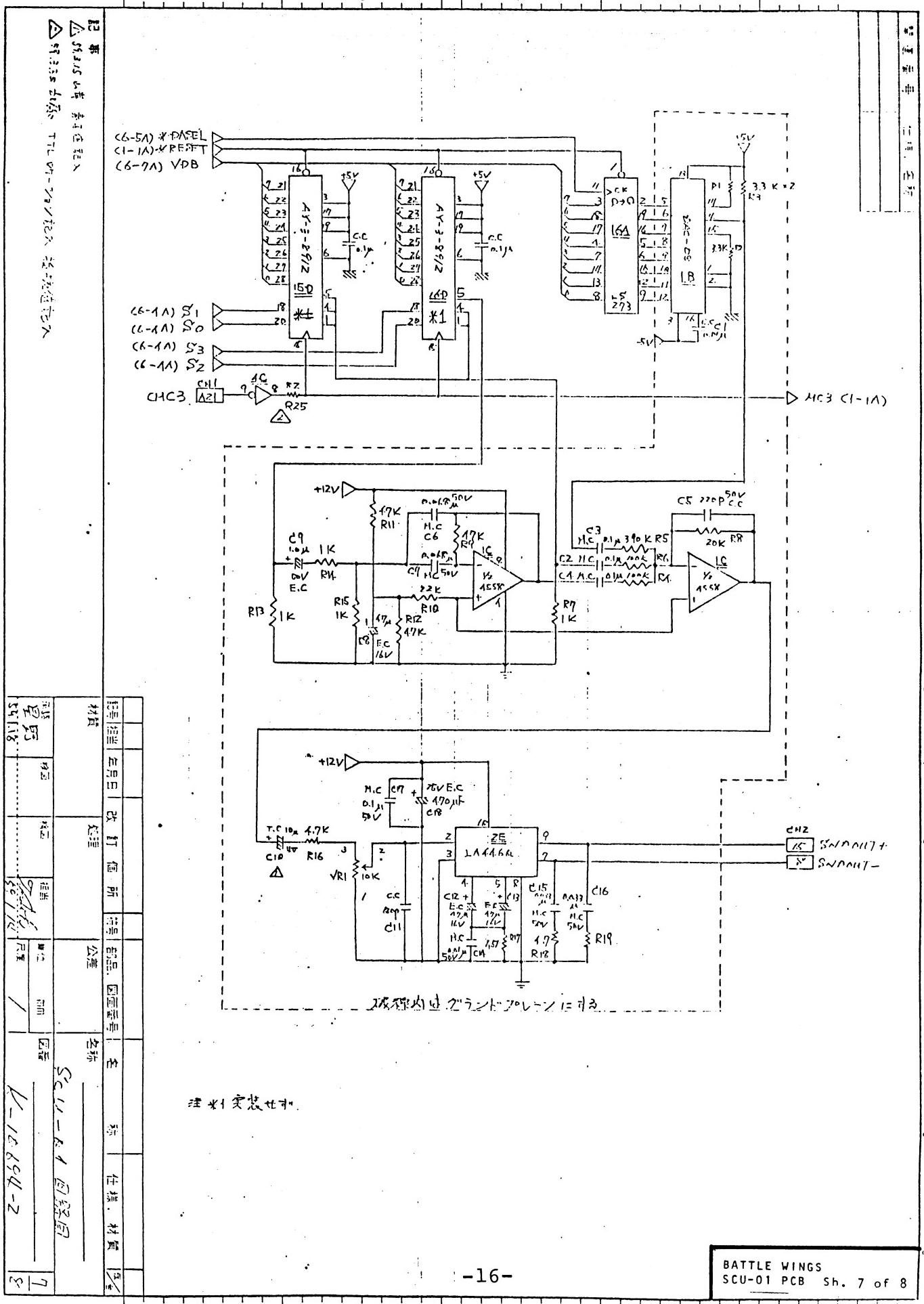


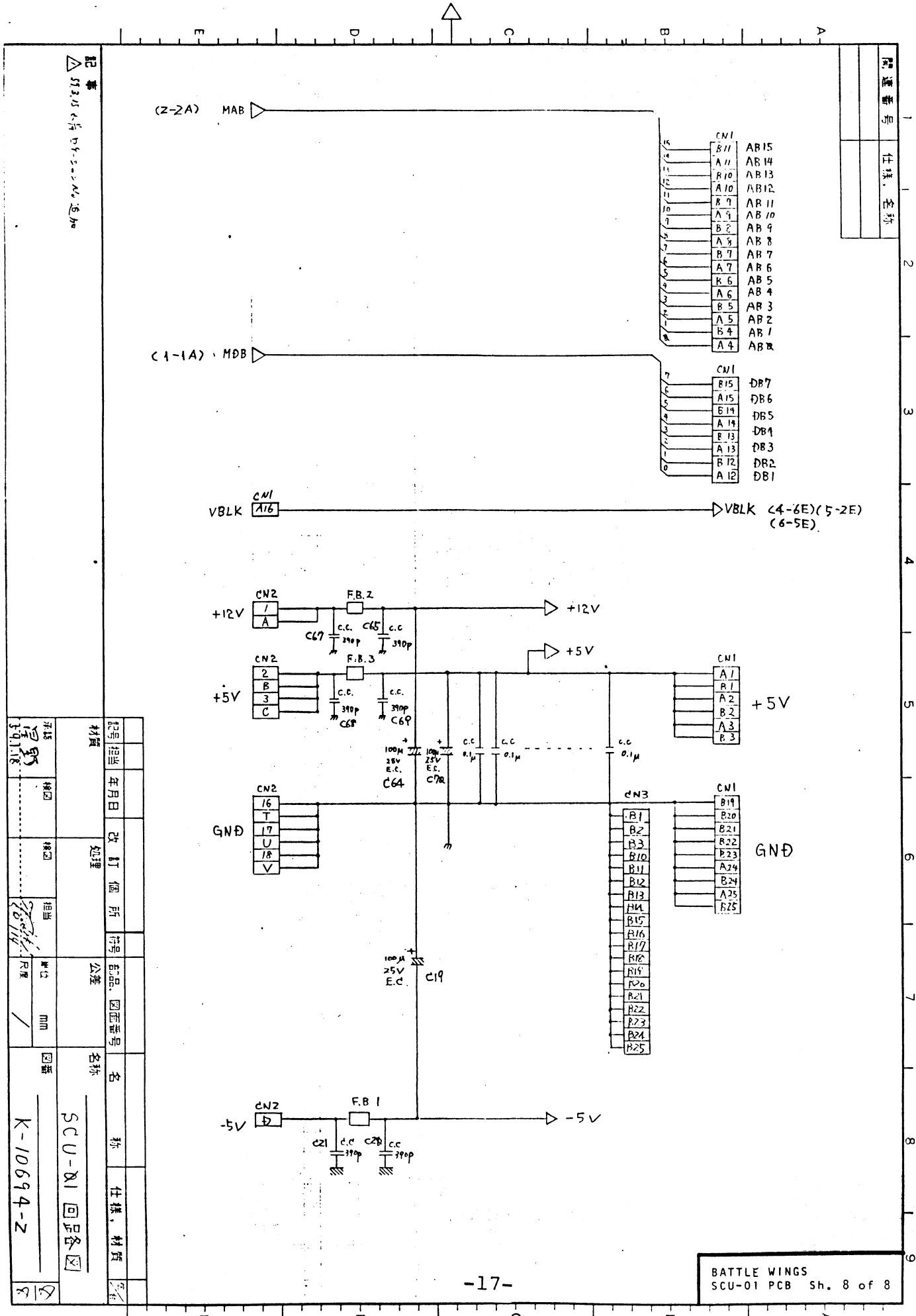
| 品名 | 規格 | 公差 | 回路番号 | 仕様、材質 |
|---------------|------|----------|-------------------|-------------|
| 相当年月日 | 改訂個所 | 符号 | 部品番号 | 名稱 |
| 滑板 5311.1K | 規格 | 公差 mm | 回路番号 K-10694-2 | SCU-81 回路各圖 |
| | | 尺寸 規格 | | 4 8 |

△ 56.3.15 諸
△ 56.3.15 諸

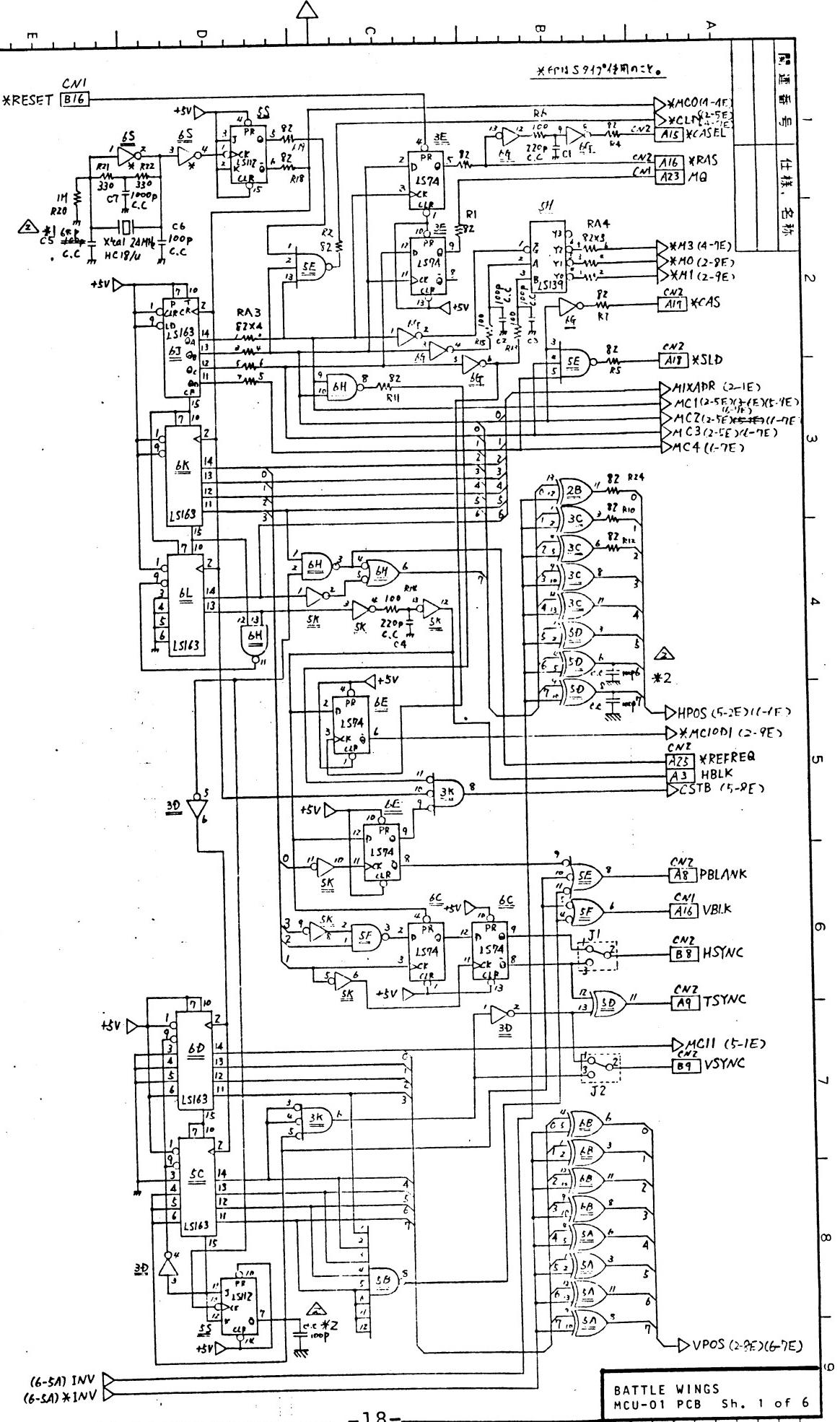


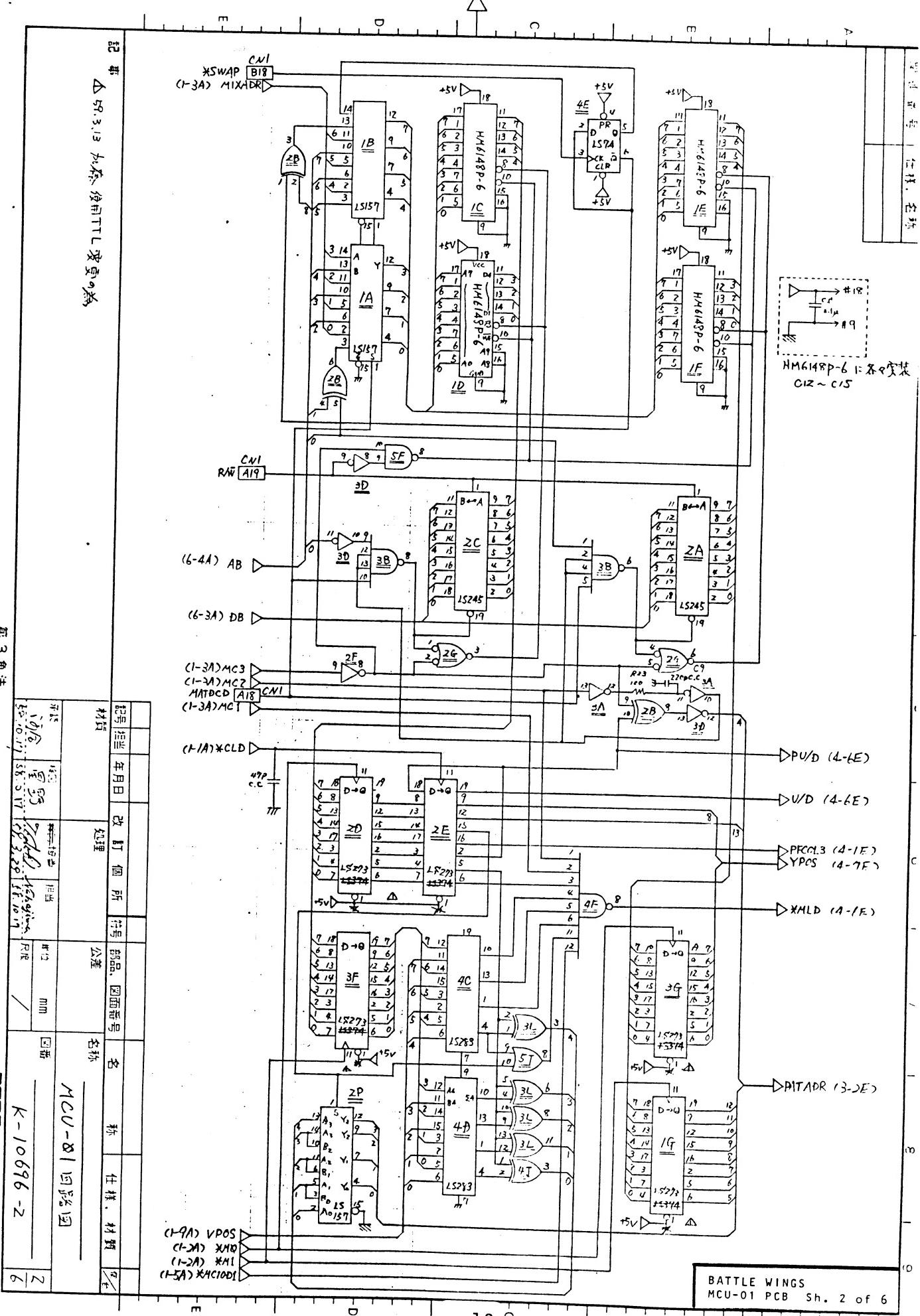


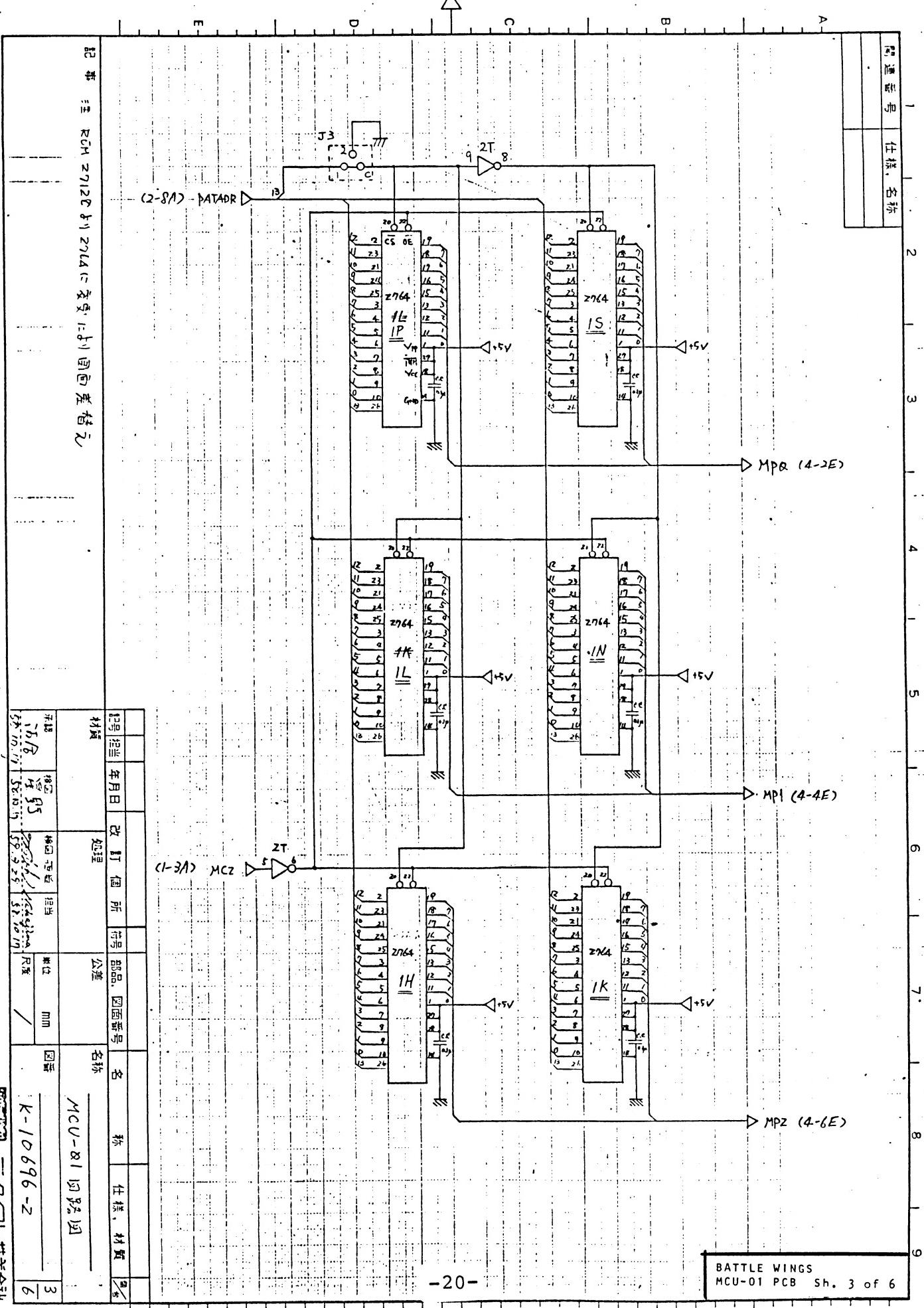




-17-

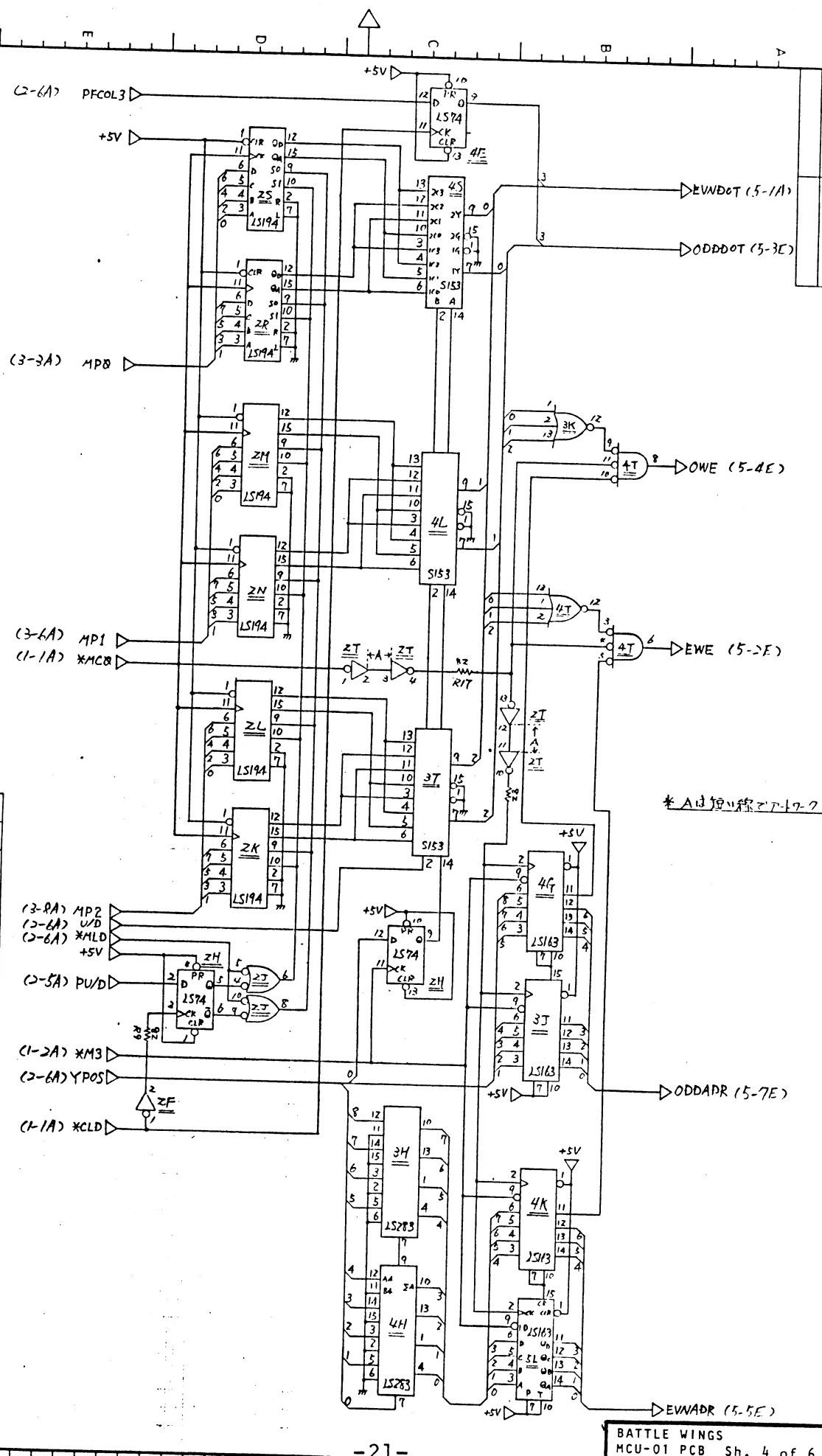


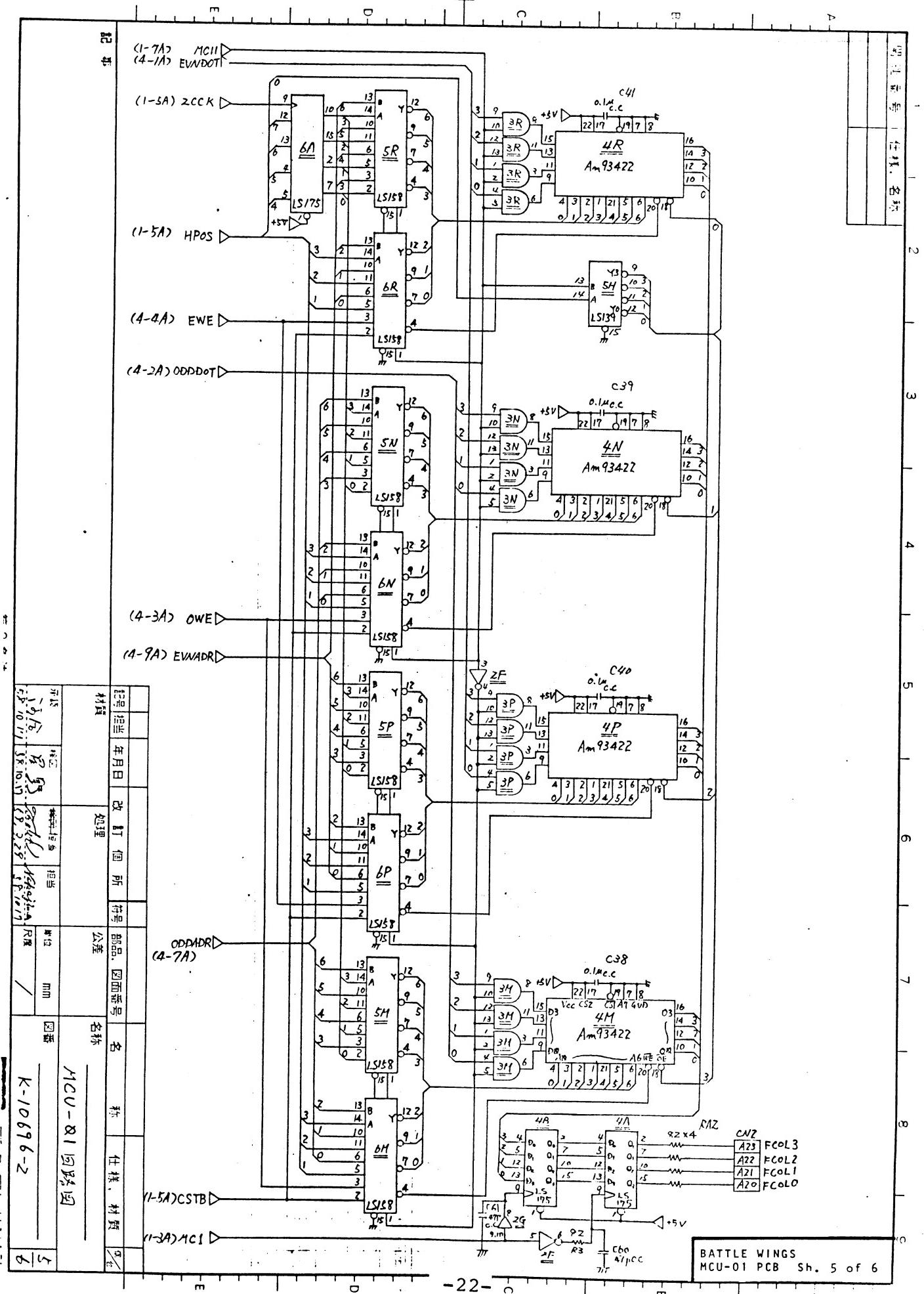


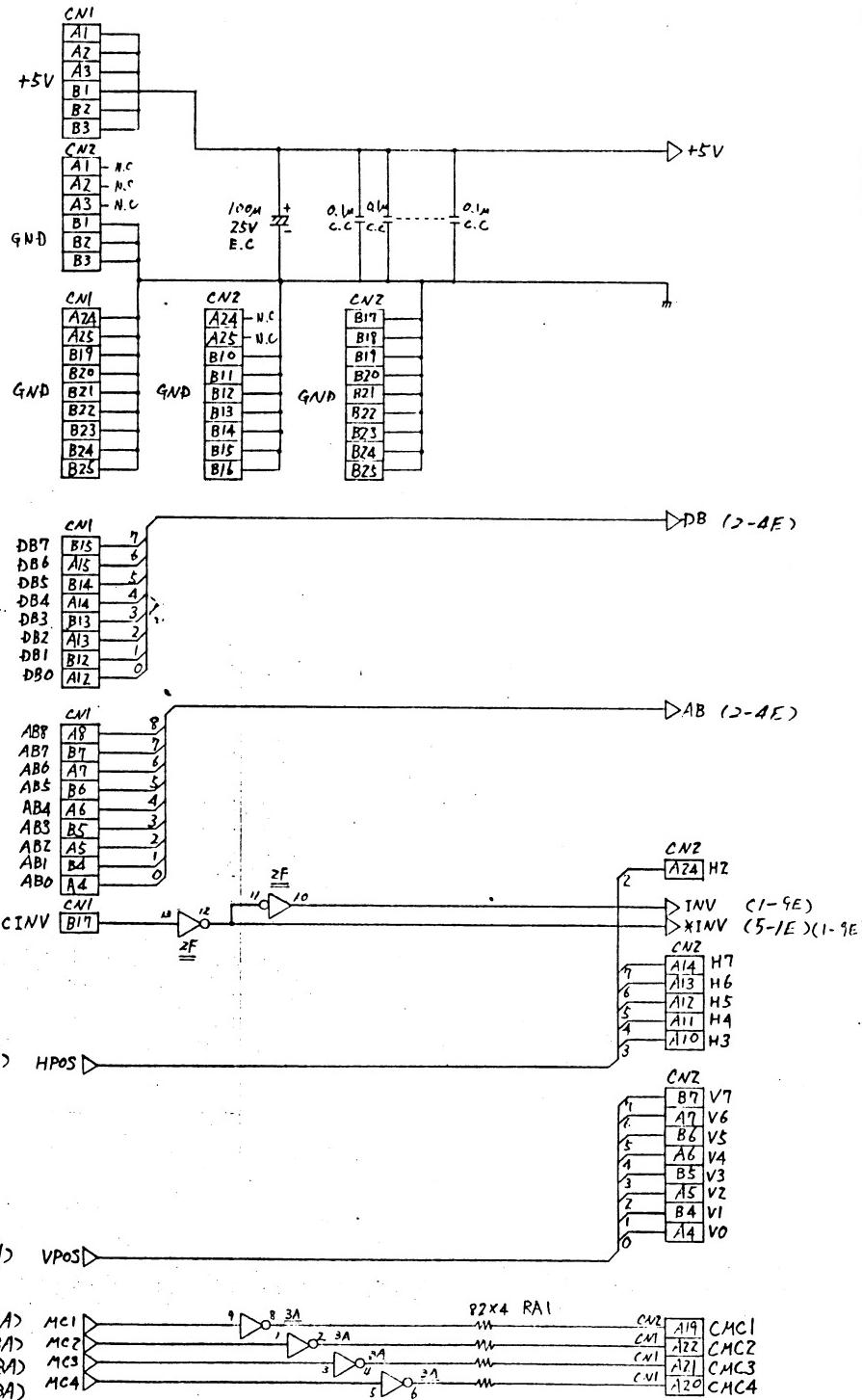


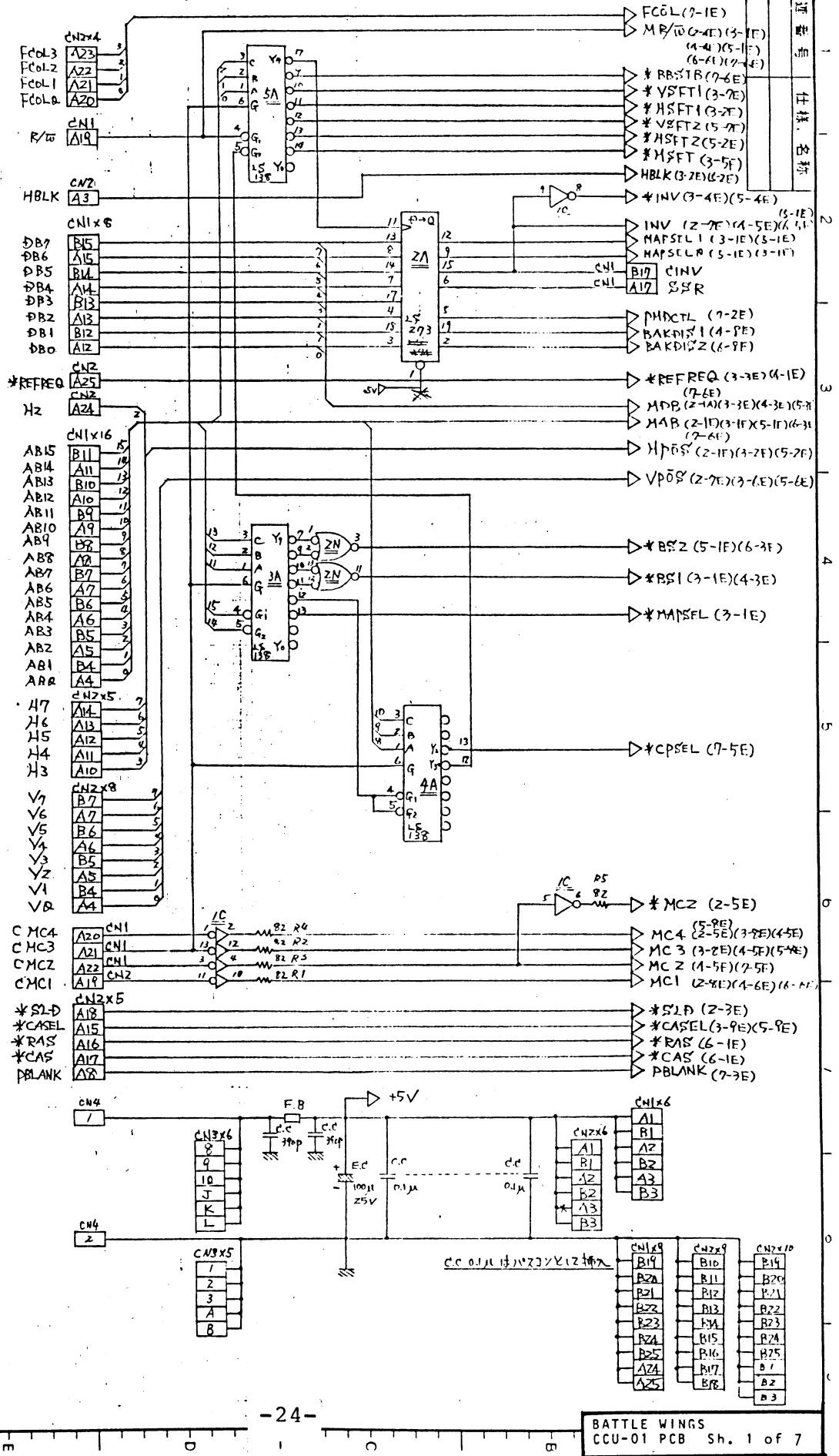
| 部品、回函番号 | 名 称 | 仕様 | 材質 | 記入欄 | |
|---------|-----|----|----|-----|------|
| | | | | 年月日 | 改訂個所 |
| 12号担当 | 处理 | 公差 | 名稱 | | |
| 材質 | | | | | |

| 記号 | 担当 | 年月日 | 改訂 | 個所 | 所 | 符号 | 部品、回路番号 | 名 | 称 | 仕様、材質 | 記 |
|--------------------------|--------------------------|-----|----|----|---|----|---------|---|---|-------|---|
| 元: S J-10-6 J-10-7 | 新: S J-10-6 J-10-7 | 担当 | 改訂 | 個所 | 所 | 符号 | 部品、回路番号 | 名 | 称 | 仕様、材質 | 記 |
| (C-6A) PFCOL3 | | | | | | | | | | | |
| (3-3A) MP8 | | | | | | | | | | | |
| (3-6A) MP1 | | | | | | | | | | | |
| (1-1A) XMC8 | | | | | | | | | | | |
| (3-8A) MP2 | | | | | | | | | | | |
| (2-6A) *MLD | | | | | | | | | | | |
| (2-6A) *ZL | | | | | | | | | | | |
| (2-5A) PU/D | | | | | | | | | | | |
| (1-2A) *M3 | | | | | | | | | | | |
| (2-6A) YPOS | | | | | | | | | | | |
| (1-1A) *CLD | | | | | | | | | | | |



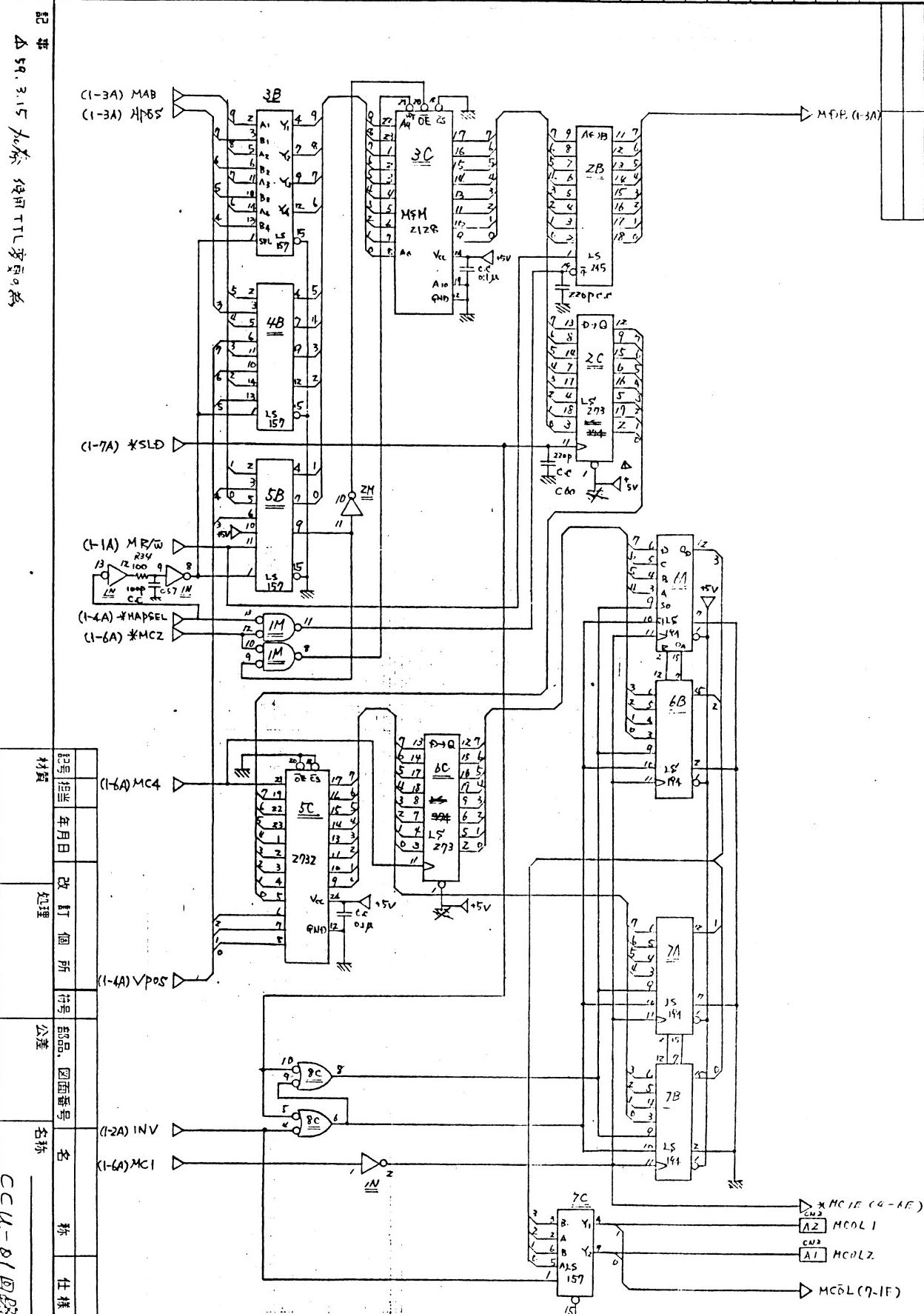




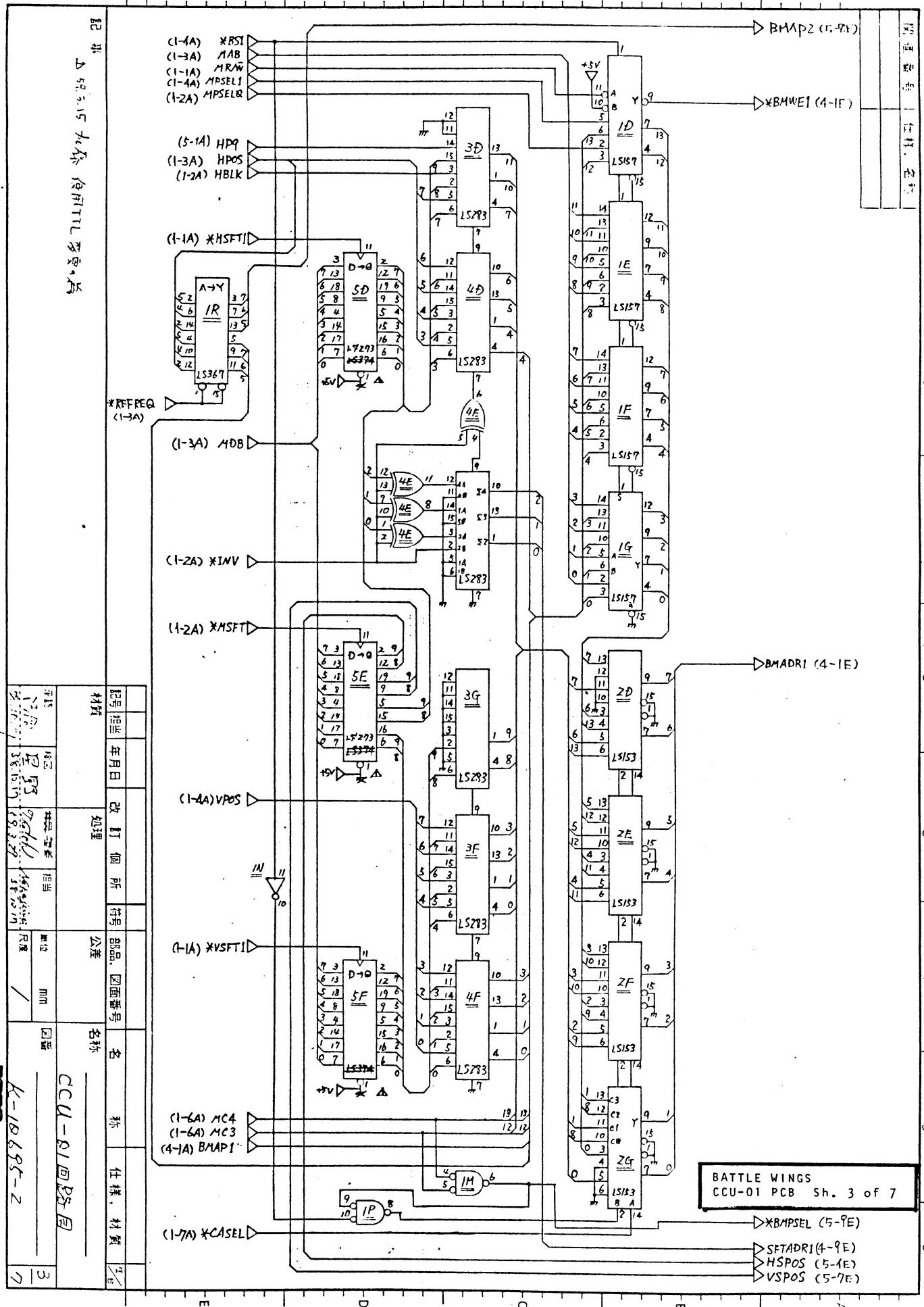


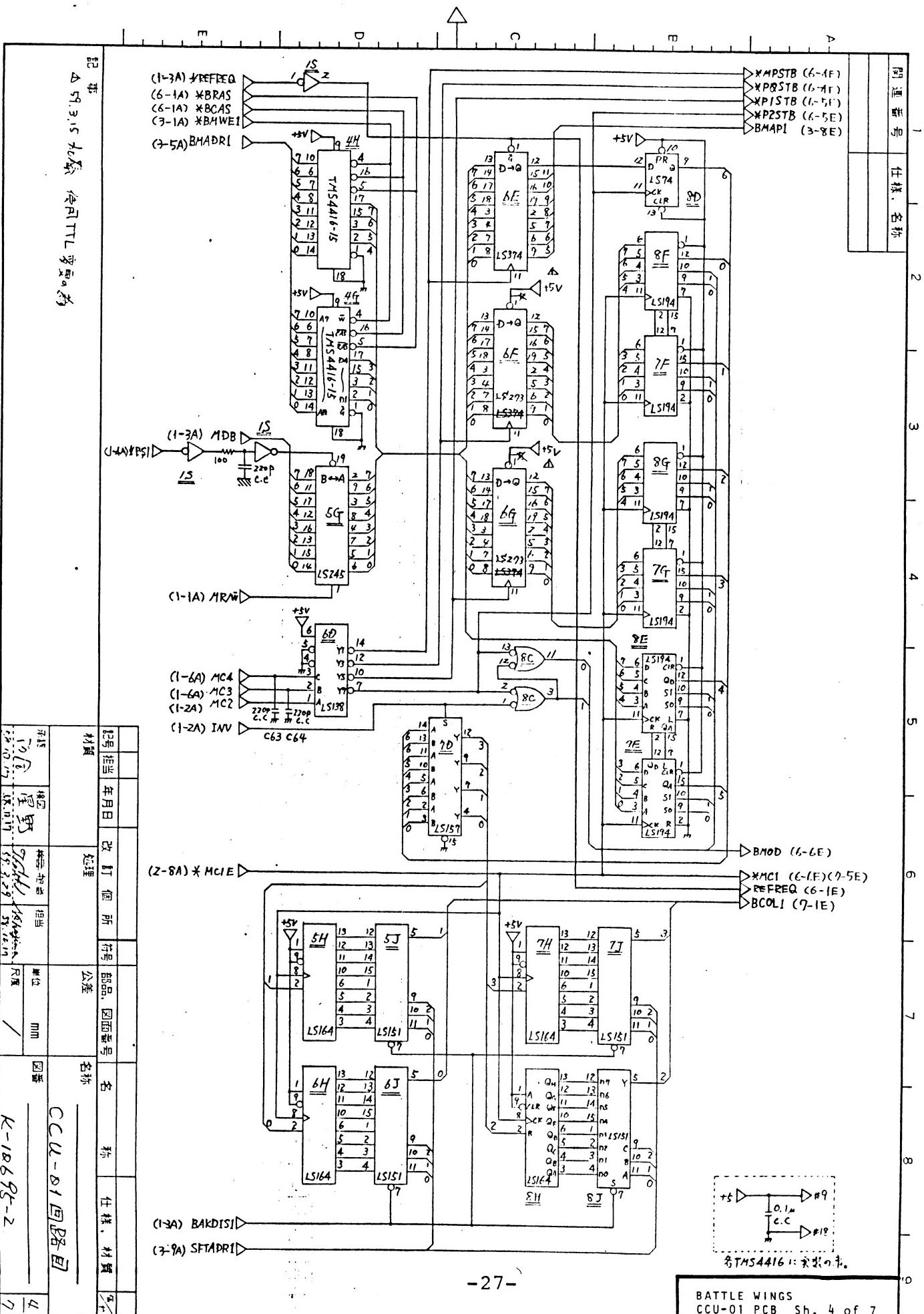
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|----|----|----|-----|----|----|----|---------|----|----|-------|----|
| 材質 | 處理 | | | | | | | 公差 | 名称 | | |

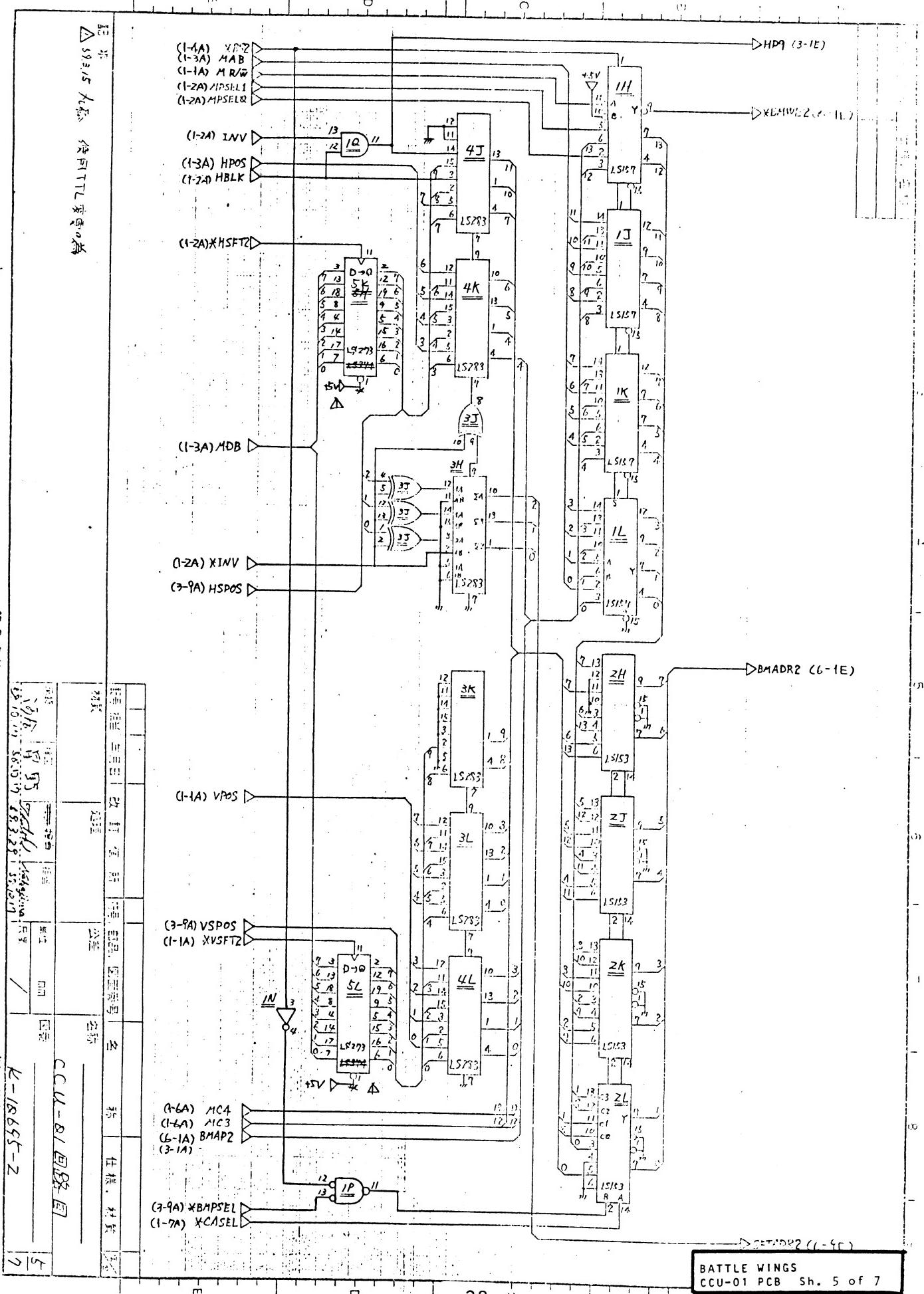
| 開通番号 | 仕様、名称 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
|------|-------|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | |



| 記号 | 相当年月日 | 改訂 | 所 | 符号 | 部品、回路番号 | 名 | 称 | 仕様、材質 | 名 |
|----|-------|----|---|----|---------|---|---|-------|---|
| 記号 | 相当年月日 | 改訂 | 所 | 符号 | 部品、回路番号 | 名 | 称 | 仕様、材質 | 名 |







BATTLE WINGS
CCU-01 PCB Sh. 5 of 7

